

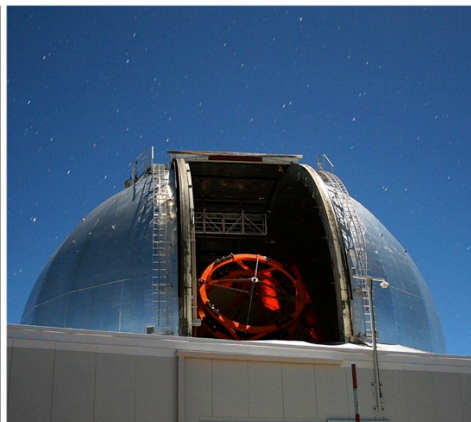
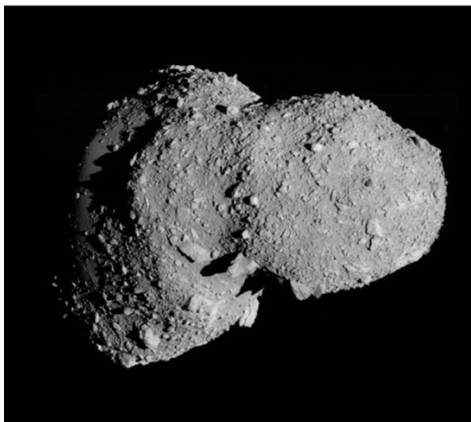
National Aeronautics and Space Administration



Asteroid Grand Challenge

AGC Update

Jason L Kessler



Join the discussion and send questions to: #AskNASA



**Find all asteroid threats to
human populations and know
what to do about them**



- **International Asteroid Warning Network (IAWN)**
 - Charter meeting in Boston, MA January 13th-14th
- **Space Mission Planning Advisory Group (SMPAG)**
 - First meeting in Darmstadt, Germany February 6th-7th
- **UN COPUOS brief in Vienna on February 11th**
- **Initial engagement with South Africa to close a critical observation gap**
 - In collaboration with the International Astronomical Union's Minor Planet Center, developed an effective "curriculum" that could be replicated for other international partners
 - South African engagement included representative scientists from Burkina Faso, Gabon, Namibia, and Zambia

SpaceGAMBIT Space Act Agreement



“Connecting makerspaces and hackerspaces to research and explore space.”

- **Virtual maker meetups**
- **Call for maker projects centered on education and outreach**
- **Educational space exploration badges for young citizen scientist**
- **Remotely controlled telescope Hackathon**

www.spacegambit.org

Asteroid Data Hunter Video



Watch the video at:

www.youtube.com/watch?v=7wUrXAvWDOE

Asteroid Data Hunter Update

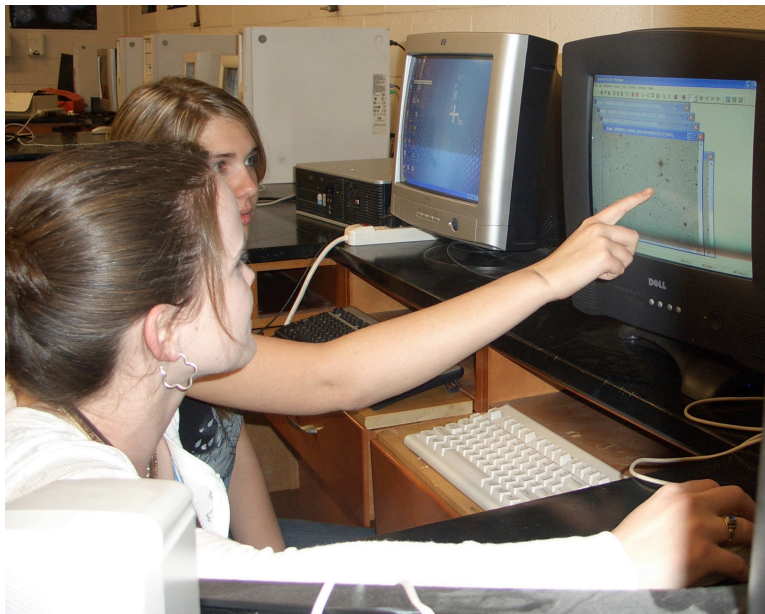


- **As of Monday the 24th, 27,098 unique visitors have visited the Asteroid Data Hunter (ADH) site since March 10th**
 - One contest last fall had 5,468 unique visitors since September 2013
- **Of the visitors, 368 have registered for this first challenge which should close April 3rd**
- **None of the \$35,000 has been paid yet**
- **Creation of a preliminary/beta algorithm will begin on April 18th**

International Asteroid Search Collaboration



- The International Astronomical Search Collaboration (IASC = “Isaac”) started in October 2006 at Hardin-Simmons University (Abilene, TX) with 5 schools. It is an online education and public outreach program in astronomy for high schools and colleges **and now middle schools** with 500 schools in 70 countries.



Dillard Drive Middle School

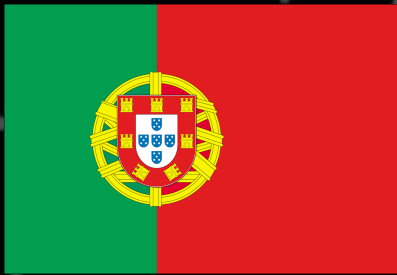


**Mrs. Catherine Rohrbaugh
Steven Powell, Yamir Johnson,
Ryan Mitchell-Bagley and Emily Hiller**

International Astronomical Search Collaboration



USA



Portugal



India



Iran



Morocco



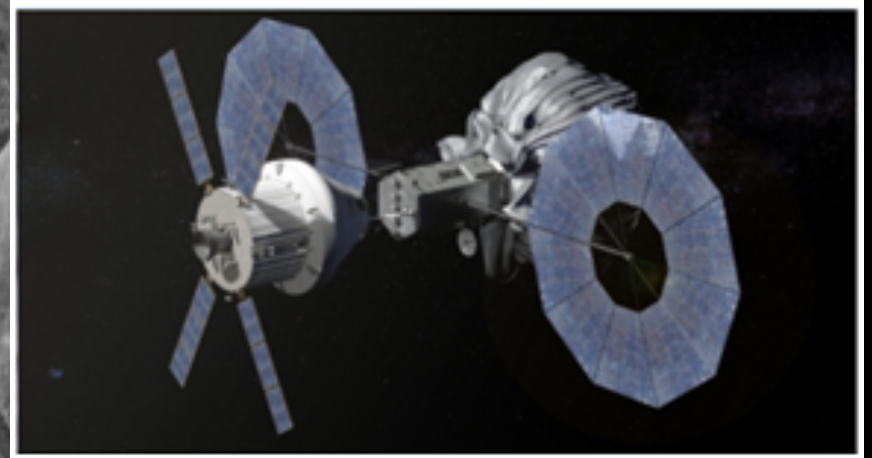
Bulgaria



Italy

NASA's ARM

**A steroid
R edirect
M ission**



Current NEO Search

March 24 - April 28

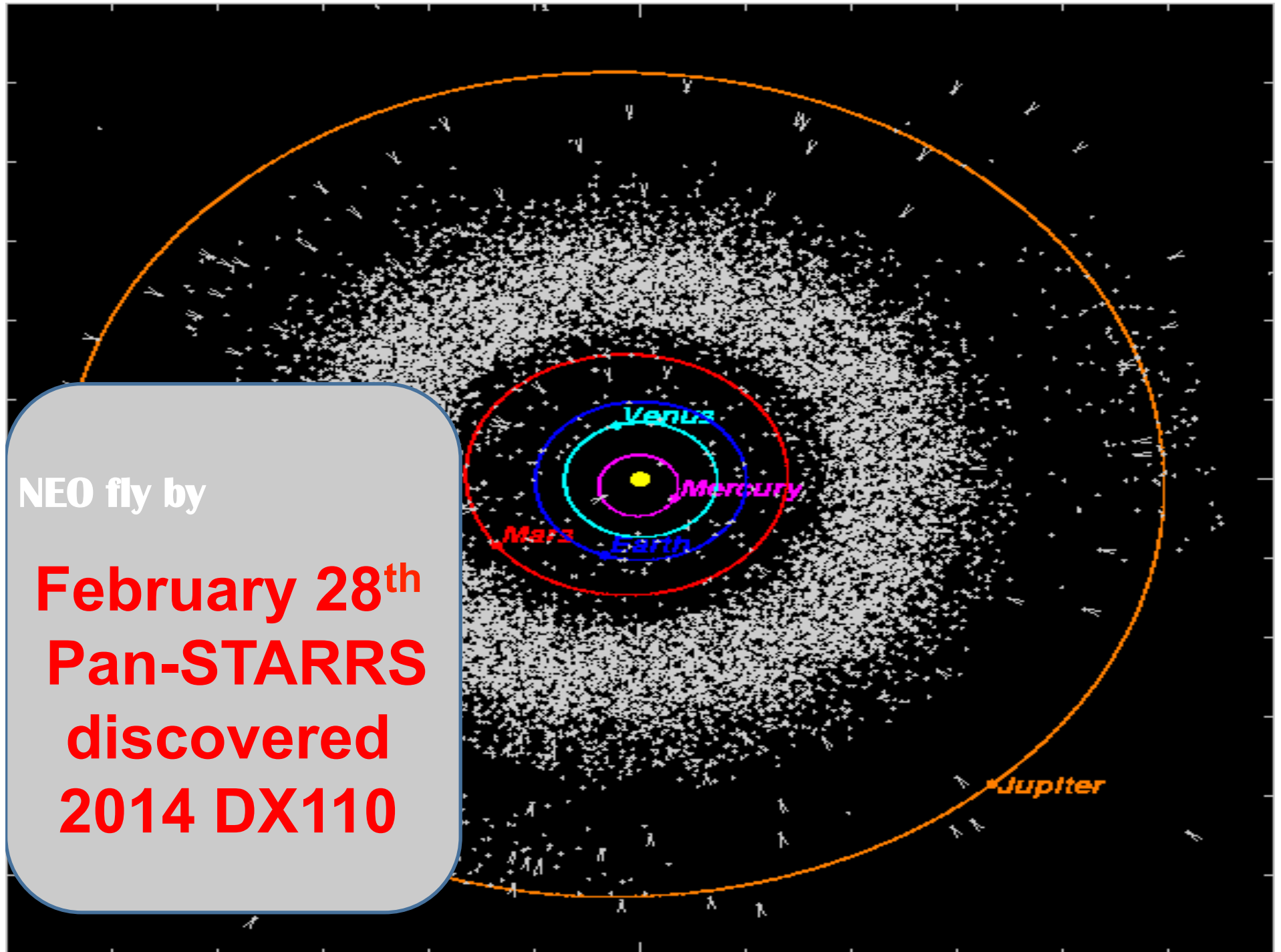
**PANORAMIC
SURVEY
TELESCOPE
AND
RAPID
RESPONSE
SYSTEM**



www.ifa.hawaii.edu

NEO fly by

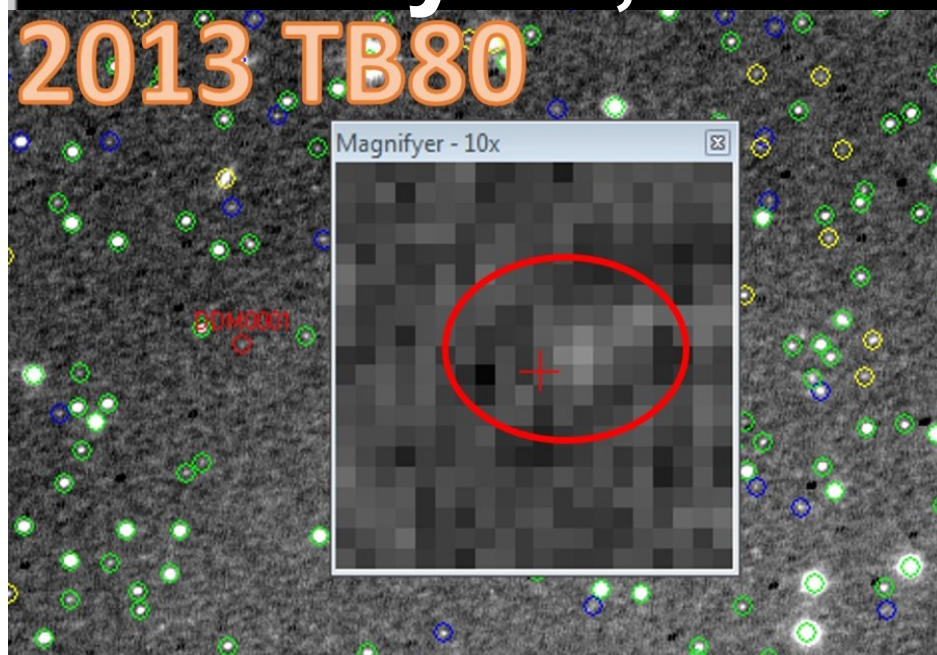
February 28th
Pan-STARRS
discovered
2014 DX110



Results

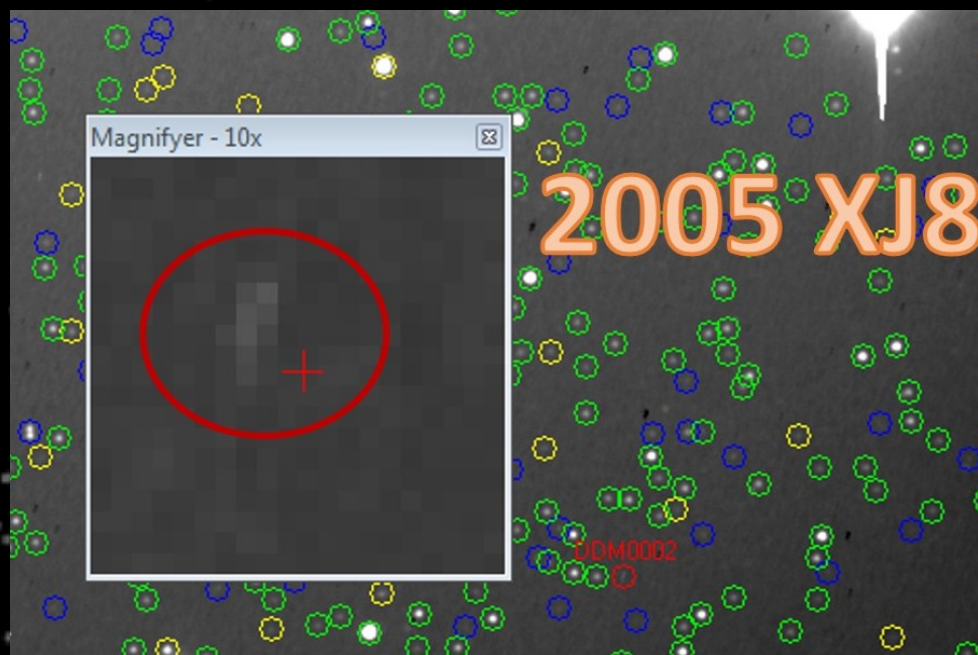
January 16, 2014

2013 TB80



January 14, 2014

2005 XJ8



January 17,
2014

2014 BQ

January 30,
2014

2013 XG22



We are extremely grateful to NASA for giving us this once in a lifetime opportunity and we hope to see you next year ;)

International Space Apps Challenge



- **Five themes**

- Technology in Space
- Human Space Flight
- Earth Watch
- Robotics
- **Asteroids**

- **Asteroid themes**

- Asteroid Imagery Sharing
- Asteroid Mission Simulators
- Asteroid Prospector
- Asteroid Watchers
- Create Your Own Asteroid Mission
- Make you Own Asteroid Movie

- **April 12-13**

- Find a location here:

<https://2014.spaceappschallenge.org/location/>

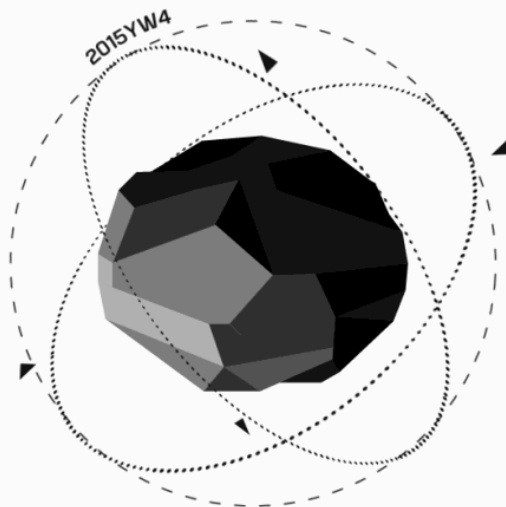


Looking Forward



- **MakerFaire in San Mateo, CA May 17th & 18th**
- **AGC Virtual Seminar Series Friday the 28th**
 - Al Harris talking about the NEA population and impact frequency
<https://ac.arc.nasa.gov/nagcss/>
 - Archived talks by David Morrison, Lindley Johnson, and Paul Chodas
http://sservi.nasa.gov/articles/events/category/seminar_series/past/
- **Planning wiki**
<http://agcnotes.wikispaces.com/home>
- **Anniversary Event- June 18, 2014**





ASTEROID

GRAND CHALLENGE

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conversation
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